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NGC-262/22-0177

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Patent Application

MAY 30 2008

Inventor(s): Harvey L. Berger
Case No.: NGC-262/22-0177
Serial No.: 10/733,506
Filing Date: 12/11/2003
Title: METHOD AND APPARATUS FOR REDUCING DATA RATE
TRANSMITTED IN A BEAM WITHOUT AFFECTING ITS POWER FLUX
DENSITY

Examiner Ramnandan P. Singh
Art Unit: 2614

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being sent via facsimile transmission to Commissioner for Patents, Mail Stop Amendment, Group Art Unit 2614, Attention: **Examiner Ramnandan P. Singh**, P.O. Box 1450, Alexandria, VA 22313-1450, at fax number (571) 273-8300, on May 30, 2008.



Carmen B. Patti
Attorney for Applicant
Reg. No. 26,784

Date of Signature: May 30, 2008

Commissioner for Patents
Mail Stop Amendment
Group Art Unit 2614
Attention: Examiner Ramnandan P. Singh
P.O. Box 1450
Alexandria, VA 22313-1450
Fax Number (571) 273-8300

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

Applicant requests review of the final rejection of this application. No amendments are being filed with this request. This request is being filed with a Notice of Appeal. The review is requested for the reasons stated on the attached sheets.

REMARKS

Claims 1-13 are pending. Claims 1-13 were rejected under 35 U.S.C. § 103 (a).

Rejections Under 35 U.S.C. § 103 (a)

Claims 1-13 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tomlinson et al., "Fade Countermeasures at Ka Band: Direct Inter-establishment Communications Experiment (DICE)", IEEE Colloquium, December 17, 1991, pages 4/1 - 4/6.

Claims 1, 6 and 11 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over U. S. Patent Number 5,325,394 issued to Bruckert on June 28, 1994.

Applicant respectfully traverses these grounds of rejection for the following reasons.

First, applicant's claim 1 recites,

"selecting a reduced information data rate that is a fraction of a full data rate R, wherein the reduced information data rate is 1/4 of the full data rate R;

randomizing the reduced data rate information signals to produce an encoded data stream at the full data rate R; and

transmitting the encoded data stream;

wherein the reduced information data rate results in an enhanced signal-to-noise ratio, per bit of information, and wherein transmittal of the encoded data stream at the full data rate ensures that power flux density will not be significantly changed."

As stated in the Final Office Action, Tomlinson does not teach or suggest all of the limitations of applicant's claim 1. Tomlinson discloses reducing the information rate with respect to the chirp rate in a direct sequence spread spectrum system. More specifically, Tomlinson discloses that the data portion of compressed video may be reduced, as stated in section 2. However, Tomlinson does not disclose a value for the decrease in the source data rate. Thus, Tomlinson is missing the "wherein the reduced information data rate is 1/4 of the full data rate R" elements, as recited in applicant's claim 1.

Also, as stated in the Final Office Action, Bruckert does not teach or suggest all of the limitations of applicant's claim 1 either. This is because Bruckert, similar to Tomlinson, does not disclose a value for a reduced information data rate. Thus, Bruckert is missing the "wherein the reduced information data rate is 1/4 of the full data rate R" elements, as recited in applicant's claim 1.

Thus, the clear teaching of Tomlinson or Bruckert is that the reduced information data rate is not 1/4 of the full data rate.

Therefore Tomlinson and Bruckert do not teach or suggest all of the limitations in applicants' claim 1, and therefore claim 1 is allowable over Tomlinson and Bruckert. Since claims 2-5 depend from allowable claim 1, these claims are also allowable over Tomlinson and Bruckert.

Independent claims 6 and 11 each have limitations similar to that of independent claim 1, which was shown is not taught by Tomlinson or Bruckert. For example, claim 6 recites, "means for reducing the rate of an information data stream to be transmitted from a full rate R to a selected reduced rate, wherein the selected reduced rate is 1/4 of the full data rate R" and claim 11 recites "a data rate control device operable to reduce the rate of an information data stream to be transmitted from a full rate R to 1/4 of the full data rate R". Tomlinson and Bruckert do not teach or suggest these limitations for the above-mentioned reasons. Therefore, claims 6 and 11 are likewise allowable over Tomlinson and Bruckert. Since claims 7-10 depend from claim 6, and claims 12-13 depend from claim 11, these dependent claims are also allowable over Tomlinson and Bruckert.

Second, Tomlinson and Bruckert do not teach or suggest the limitations of applicant's claims 10 and 13. This is because Tomlinson discloses a direct sequence spread spectrum system that uses frequency division multiple access (FDMA). Bruckert discloses a communications channel that uses quadrature phase shift key (QPSK) to modulate a signal, as stated in column 6, lines 56-61. By contrast applicant's claims 10 and 13 require binary phase shift keying (BPSK) to modulate a carrier. Thus, Tomlinson and Bruckert are missing the "BPSK" elements, as recited in applicant's claims 10 and 13.

Third, Tomlinson and Bruckert do not teach or suggest the limitations of applicant's claims 9 and 12. This is because neither Tomlinson nor Bruckert disclose the use of data buffers as the means to reduce the information rate. Thus, Tomlinson and Bruckert are missing the "data buffers" elements, as recited in applicant's claims 9 and 12.

Conclusion

In view of the above remarks, withdrawal of the rejections and/or reversal of the rejections of all claims pending is respectfully requested.

If a telephone conference would be of assistance in advancing the prosecution of this application, feel free to call applicants' attorney.

Respectfully submitted,



Carmen B. Patti
Attorney for Applicant
Reg. No. 26,784

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PATTI, HEWITT & AREZINA, LLC
Customer Number 32205